

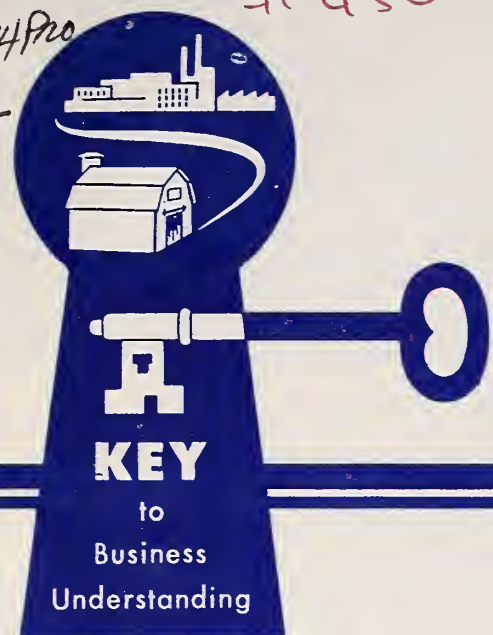
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# Town and Country BUSINESS PROGRAM

## TRANSPORTATION: Link From Producer to Consumer

**M**ARKETING IS responsible for getting products to consumers in the right place at the right time and in best possible condition. This activity invariably involves some kind of transportation, which becomes one of the links between producer and consumer.

In this country it all started with the "Wunder Wagon" — a product of the rich Conestoga Valley, Lancaster County, Pennsylvania. Fertile Lancaster County was literally the bread basket of the nation.

The "Wunder Wagon" was so closely associated with this historic valley that it became known as the "Conestoga Wagon." So familiar was its appearance on the frontier that people soon called it the covered wagon for its characteristic white canvas stretched over hickory bows to protect the cargo.

The bountiful Conestoga Valley, carefully nurtured by its Pennsylvania Dutch settlers, provided a surplus of food far beyond the needs of the farmers who lived there. These thrifty people designed this wagon to help solve the first agricultural surplus problem of the nation. Just 75 miles to the east of the valley lay Philadelphia, the biggest, hungriest city of the new world. The road was but an excuse for a highway, and the wagons of the day were not designed for hauling cargo. To meet this situation, a new vehicle of transportation was provided — one that became the symbol of pioneering and adventure in a new nation.

The wagons served well. They developed markets, linked Philadelphia and frontier Pittsburgh, hauled food for soldiers of the Revolution, the Mexican War, and the Civil War.

Through more than 175 years the markets of the nation were served largely by this unique mode of transportation developed by Pennsylvanians.

But, we are more interested in the role that transportation plays in today's marketing and business: the air, rail, motor truck, and water shipments which serve to make marketing possible.

In the days of the Conestoga Wagon, shipments by water were as important as shipments by wagons. Today, however, the transportation of agricultural commodities on inland and coastal waterways is small.

### Carriers and Government Regulations

Transportation now is provided through a network of railroads, highways, waterways, and airlines. The various kinds of transportation are referred to as carriers. Carrier firms range in size from a trucker with a single vehicle to the giant railroad, trucking, shipping, or airline corporation.





A *common* carrier is any transportation agency available to the general public or anyone requiring transportation service. *Contract* carriers make independent arrangements as to rates and other stipulations directly with the shipper. The *private* carrier provides shipment only for his own cargo.

Common carriers are regulated by government in many aspects of their business operations. They must have a certificate of public need and convenience in order to operate. Rates, operating routes, insurance, and most other aspects of transactions of common carriers come under the close supervision of governmental agencies. Contract carriers have somewhat less governmental control over their operations. The private or noncommercial carriers are subjected only to regulations related to safety. In truck transportation most of the trucks are operated as private carriers with less than one fourth being common carriers. Haulers of certain listed farm products by truck are exempted from route and rate regulations.

The Federal agencies which regulate transportation are the Interstate Commerce Commission for trucks and railroads, the Civil Aeronautics Board for airlines, and the Federal Maritime Board for steamship services. In its regulation of transportation the Federal government is concerned mainly with transportation from one state to another.

All states have a public agency which exercises control over the transportation from one place to another within its own borders.

## Trucks and Railroads Most Important

Railroads began their growth in the mid 19th century to dominate the transportation systems. Then, in the early 1900's, the motor truck began to appear in cities for local hauls. In 1930 trucks accounted for nearly one fourth of the total agricultural costs of hauling farm products. While the development of a system of highways has reduced the proportion of hauling done by railroads, they remain an important carrier for servicing agricultural and other markets. Unlike the trucking industry, which ranges from a one-man, one-truck size firm to sizable corporations listed on big stock exchanges, the railroads are organized into large corporations often owned by stockholders numbering hundreds of thousands.

For the long-distance, big-volume shipments railroads provide services which other types of carriers have difficulty in matching. The nation's farms are the basis for a large portion of the hauling done by rail: about 18 per cent of the revenue of American railroads comes from hauling agricultural commodities. One has only to watch the passing boxcars to recognize the extent to which railroad and farm have dependent interest. About 16 per cent of all boxcar



loads originate in agriculture and better than 9 out of 10 of the loaded refrigerated cars you see are hauling agricultural products.

## Tariff and Rates

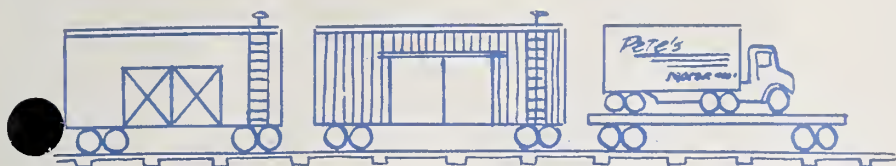
The establishment of rates to charge for hauling by railroads and highway carriers is a complex and intricate procedure. Consideration of factors that determine freight rates for various types of cargo is called rate making. The decisions are the responsibility of the traffic departments of the carriers. These rates are published as "tariffs" or rate schedules. While the railroad and trucking firms are free to announce any rates they believe necessary, the Interstate Commerce Commission will suspend them if they are thought to be unreasonable. The Interstate Commerce Commission considers the cost of service performed and the competitive situation in approving the rates established by the railroads and trucks. The Commission assumes the responsibility to see that the rates are reasonable, and that there are no unlawful rebates. They also assure that the rates do not discriminate against any particular people, geographic locations, or commodities.

## Other Services in Transportation

Railroads and other carriers do more than haul cargo. Railroads must provide stop-over points along the routes so livestock may be fed, watered, and rested. Railroads give livestock shippers the opportunity of stopping a shipment to "try the market." If the price is not satisfactory, the shipment can be hauled to the next market at the "through" rate. This flexibility gives the livestock shipper a chance to move his cattle to the most favorably priced market.

The shipper of agricultural commodities by rail can change his mind about the destination of his products during shipment. In fact, a carload of products may be started on its way to market without a definite city in mind. While the load is enroute, it can be diverted to the most favorable market that develops in the meantime. If the shipment has already reached its destination, it can be reconsigned to another point without being reloaded. The rate will continue at the "through" rate as long as no back haul is involved.





Most freight cars are owned by the railroads. Each can be identified by the initials and numbers on the cars. There is free-flow of cars on competitive lines, but each car number is recorded as it passes from one line to another. Each railroad reports to every other railroad the "foreign cars" on its lines. The railroads then pay a daily rental for the time that the "foreign car" is on its tracks.

The shipment of agricultural products — livestock, dairy products, and perishable fruits and vegetables — receives special consideration by railroads. This treatment has resulted in what the respective railroads refer to as "redball," "fast," and similar freight services. These special hauls are given the right of way over regular freight services and sometimes take precedence over certain kinds of passenger trains. In effect, these special freight services can almost approach the speed of passenger service.

You'll often hear a freight man talk about "demurrage." Demurrage is the time required for loading and unloading a freight car. Usually railroads allow 48 hours for loading and unloading. After this time railroads charge a demurrage fee for detaining the car.

## Motor Trucks Show Growth

In recent years the share of farm products moved by truck has increased tremendously. Trucks do nearly all of the short hauling of agricultural products, and they are becoming more important in the long-distance haul. This use has been made possible because of the dramatic improvement in highway systems and equipment used by trucking firms. Trucks have the advantage of being able to provide door-to-door service. When shipped by rail, products must be loaded on a local truck, hauled to the railroad car, and transferred again. A local truck haul also may be needed at the other end of the rail trip.

Competitive aspects of truck and rail freight have resulted in better service and improved marketing. Railroads, for example, developed the highspeed freight service which already has been discussed. They also have moved into "piggy-back" service, which for many types of cargo combines the advantages of rail and truck transportation. "Piggy-back" involves the carrying of loaded truck trailers on railroad flat cars.

Shipping by truck provides a great deal of flexibility in movement of products. Most firms maintain contact with their fleets by telephone. Drivers enroute call in for instructions, and their destinations can be shifted according to the needs of the market. Trucks which start for New York City can be shifted to Buffalo or Pittsburgh. However, this flexibility is often impeded by widely differing laws as to size and weight limits for their loads.

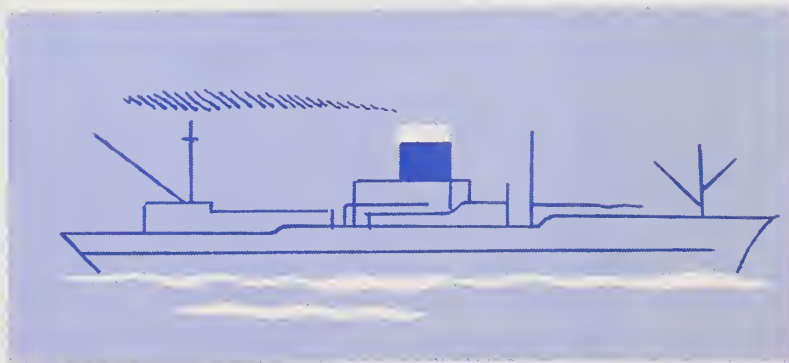
While farmers use their own trucks to do more than half the hauling to the first market, the second movement to the bigger markets is done by specialized transportation firms or common carriers. Railroads are the predominant means of transporting grain, while trucks carry the bulk of the livestock, poultry, and dairy products. In the transportation of perishable fruits and vegetables, both trucks and rail loom important. Which is used depends on length of haul, facilities available, and the competitive rates that exist between the two types of transportation.

In all forms of transportation there has been progress in the development of better methods of loading and handling farm products. This improvement is important, because it reduces losses from bruising, spoilage, and quality deterioration. For example, overloading of livestock caused millions of dollars of loss.

## Water Transportation

While water transportation is not nearly so important volume-wise as is rail and truck transportation, it still plays an important role in the marketing procedure. Actually, it is more important in the marketing of nonagricultural products.

The inland waterways are especially useful in transporting grain. Barge rates for hauling grain are much lower than for either truck or rail. Where speed is not important, the inland waterway is often the most economical means of shipment. Inland barges and ships are especially adapted for transporting grain and similar bulky products. The Great Lakes, Mississippi River, and its important tributaries provide a good way for moving grain into consuming areas. Water rates are about one half those of trucks and rail.





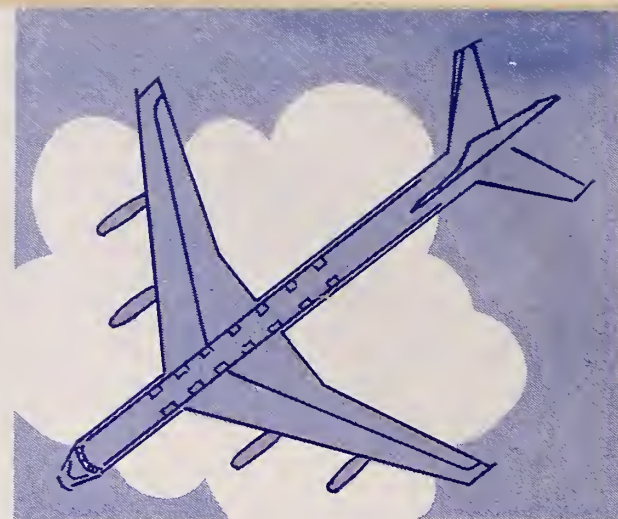
One must not overlook the role played by the export and import shipping lines that conduct foreign trade. These ships carry between 75 and 100 million tons of cargo each year — enough to fill 3600 cargo ships. The rates charged for freight in ocean shipping tend more toward “what the traffic will bear” policy than do the other types of carriers that operate only within the United States. Ocean rates are subject to very little public regulation. The export trade provides employment to a large number of workers, especially when one considers all the storage, financing, and processing needed to facilitate export trade.

## Air Freight

Air freight is becoming more important in marketing, although only a small part of agricultural production is shipped by air freight. Air freight is particularly adaptable to light-weight, high-value articles where speed of delivery is essential. There are air freight carriers in both the scheduled and nonscheduled air lines. Flowers and nursery stock comprise sizable business for the air freight lines. While air transportation rates are the most expensive of the various carriers, they are often offset by the use of lighter containers, elimination of ice, and reduced spoilage losses. Inventory and storage costs also can be lowered, because with the speed of air freight, some branch warehouses can be eliminated. Air freight is used both within the country and with principal trading areas in Europe, Africa, and Asia. Australian growers ship orchids overseas by air to the United States, Great Britain, and Europe. Each bloom has its stem in an individual test tube of water and is cushioned by layers of shredded paper with each bloom laced to the bottom of the box to prevent bruising.

The costs of transportation represent a sizable portion of the cost of marketing food and agricultural products. With fruits and vegetables now coming from the more distant areas of production, the relative importance of transportation costs in the food bill increases.

Transportation research aims to find ways of reducing the cost of transportation. For example, early work in the Department of Agriculture brought better insulation of refrigerator cars and led the railroads to install floor racks, insulated bulkheads, and forced air circulation. More recent work in the transportation of perishable foods has helped to assure full protection of foods all the way from producer to consumer.



## Transportation Offers Exciting Careers

Transportation is a major industry among American businesses. It provides opportunity for men and women interested in working with carriers of various kinds: rail, truck, air, and water. All carriers have sales departments that sell their services. Traffic management jobs are available in many firms. All carriers have traffic departments that determine rates and publish tariffs. They keep close contact with the governmental agencies, like the Interstate Commerce Commission, that provide general rules for operation of the carrier firms.

Many other firms have traffic managers, too. The traffic manager for a manufacturing firm regulates and synchronizes transportation with his knowledge of routings, loading, rates regulation, and types and conditions of equipment. He controls the movement of goods to meet the operating schedules and customers' needs. Choosing the right carrier is one of the most important jobs of the traffic manager in industry. He makes the decision to ship by truck, rail, water, or air.

In the operations department of all carriers, we find great responsibility. They develop schedules and control movement. Dispatchers keep tab on equipment along truck, rail, and airline routes. The work requires a knowledge of engineering, labor, and management.

All types of carriers are involved in terminal operations. Efficient management of terminals is necessary for the quick and efficient handling of freight. Air terminals are mostly concerned with passenger traffic, but freight will likely become more important in the years ahead. Railroads operate some of the largest terminals in the nation, which are used for the assembly of produce from all over the world.

There are many other opportunities with carriers in the transportation field: insurance, maintenance engineering, purchasing, and a variety of jobs in office management needed to handle routine records and accounts.